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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/663,557   | 09/16/2003  | Joseph Haney         | AENNO.0101            | 2592             |
| 22858  | 7590        | 06/29/2005           | EXAMINER              |                  |
| CARSTENS YEE & CAHOON, LLP<br>P O BOX 802334<br>DALLAS, TX 75380 |             |                      | WALKER, ZAKIYA NICOLE |                  |
|  |             |                      | ART UNIT              | PAPER NUMBER     |
|  |             |                      | 3676                  |                  |
| DATE MAILED: 06/29/2005  |             |                      |                       |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/663,557

Applicant(s)

HANEY ET AL.

Examiner

Zakiya N. Walker

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3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 12, 14, 15, 19, 20, 28 and 33 is/are rejected.
- 7) ☒ Claim(s) 5-11, 13, 16-18, 21-27 and 29-32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08042004</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because the term --than-- should be inserted after "greater" for clarity purposes.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 12, 19, 20, 28, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Barlow et al.

Barlow et al. discloses, with respect to independent claims 1 and 19, an improved shaped charge comprising: (a) a charge case 14; (b) a main load 28 within the charge case; (c) a layer of a polymer/polymer mixture 70 positioned between the main load and a liner 50; and (d) a booster 24 coupling the main load to an ignition source; wherein the polymer/polymer mixture undergoes a decomposition reaction to produce a fracturing pressure event (perforating a formation). With respect to the depending claims, the reference teaches the limitations as claimed, including the polymer including a metal (AL), and an ignition speed controller. The reference further discloses a method

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that includes a method of fracturing a formation comprising the steps of: (a) lowering an improved shaped charge into a well to a depth adjacent to the formation; wherein the shaped charge has a charge case, a main load within the charge case; and a layer of a polymer/polymer mixture positioned between the main load and a liner; and (b) detonating the shaped charge.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow et al. alone.

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the reference discloses the apparatus as stated above. However, the reference fails to teach the charge case comprising zinc or steel as called for in the claims. The reference does teach the charge case comprising metal, but does not specify the type. It is an obvious expedient to use a well-known type of metal material, such as zinc or steel, to encase a shaped charge. Therefore, it would have been considered obvious to one of ordinary skill in the art at the time the invention was made to have provided a charge case made of zinc or steel in order to encase an explosive charge.

#### ***Allowable Subject Matter***

7. Claims 5-11, 13, 16-18, 21-27, and 29-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

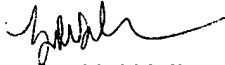
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kneisl teaches a shaped charge having a polymer binder mixed with the load.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zakiya N. Walker whose telephone number is (571) 272-7039. The examiner can normally be reached on Monday-Friday, 8:30 AM-5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Zakiya N. Walker  
Primary Examiner  
Art Unit 3676

ZW  
June 27, 2005